SSA Water Fluoridation

Water fluoridation is the process of adjusting the concentration of the naturally occurring levels of fluoride in the water to optimal levels. At optimal levels, water fluoridation is a safe, cost-effective and proven way of preventing tooth decay. The practice of water fluoridation is strongly supported by an extensive list of leading health organizations.

Surface water received from the City of Sacramento is fluoridated in accordance with CDPH standards. To maintain an optimal fluoride level and meet CDPH standards in its SSA water supply, SSWD is fluoridating its SSA groundwater supply.

SACRAMENTO SUBURBAN WATER DISTRICT 2002-2012 10th year anniversary

SSWD Board of Directors

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Monthly Board Meetings

3rd Monday of every month, 6:30 p.m.
3701 Marconi Ave., Suite 100
Sacramento

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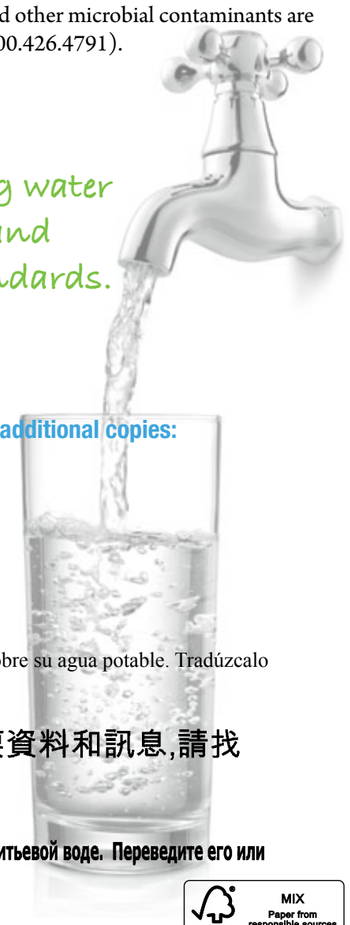
understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The USEPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Lead: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

A Note for Sensitive Populations

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800.426.4791).

Once again, your drinking water continues to meet all state and federal drinking water standards.



Need More Information?

For questions about this report, or to request additional copies:
Call Doug Cater at 916.679.2887

EPA Safe Drinking Water Hotline and Website:
800.426.4791
www.epa.gov/safewater

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

此份有關你的食水報告,內有重要資料和訊息,請找他人為你翻譯及解釋清楚。

Данный рапорт содержит важную информацию о вашей питьевой воде. Переведите его или проконсультируйтесь с тем, кто его понимает.

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SACRAMENTO SUBURBAN WATER DISTRICT 2002-2012 10th year anniversary

Annual Water Quality Report 2011

Consumer Confidence Report

SACRAMENTO SUBURBAN WATER DISTRICT 2002-2012 10th year anniversary

Sacramento Suburban Water District (District) is pleased to present this detailed report on the 2011 water quality. The District has two service areas: North and South. This report contains a summary of the detected constituents in the District's water supply from samples taken between 2003 and 2011 as well as other water quality information. Providing customers with high quality and a reliable water supply is the District's top priority.

Source of Water

The District's systems utilize both groundwater and surface water as the primary water supplies. The South Service Area (SSA) primarily provides water from 47 active wells, with treated surface water from the City of Sacramento (CS) providing the remaining water. In 2011, the North Service Area (NSA) was primarily provide treated surface water from San Juan Water District (SJWD), with water from 41 groundwater wells providing the remaining water. After water is pumped from the wells, it is chlorinated per California Department of Public Health (CDPH) requirements to protect you from potential microbiological contaminants. All facilities are operated and maintained by state certified operators. To assure your water meets all state and federal regulations, the District conducts regular water quality testing of the water from the source and in the distribution system.

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals, and in some cases radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

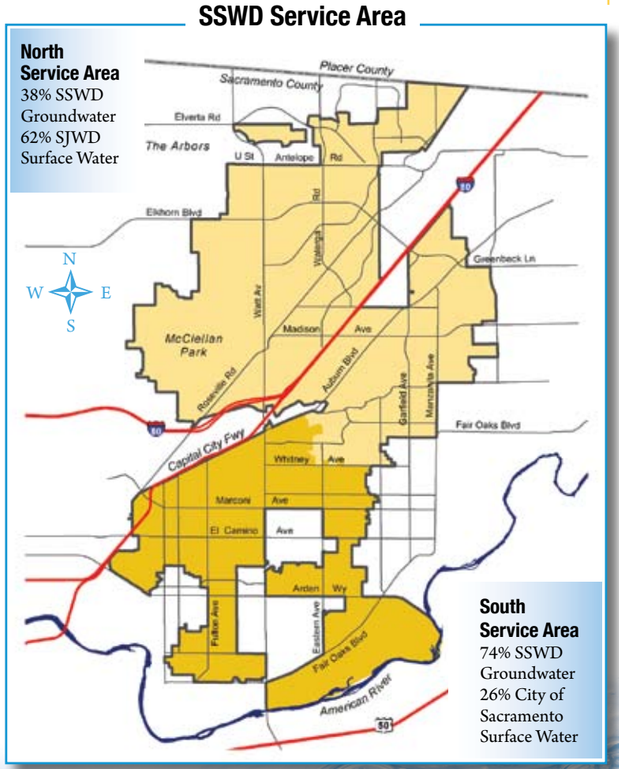
In order to ensure that tap water is safe to drink, the US Environmental Protection Agency (USEPA) and CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (800.426.4791).

Source Water Assessments

An assessment of potential contaminating activities in the recharge area of the supply wells, conducted according to state guidelines, was completed for the District's groundwater wells in December 2002. A copy of the complete assessment is available at the District's office. The results of the assessment indicated that both the South and North Service Areas are considered most vulnerable to dry cleaners, gas stations, leaking underground storage tanks, petroleum transmission pipelines, sewer collection systems, contamination caused by illegal activities or dumping, and general urban commercial activities such as automobile repair facilities and photo processors. The NSA is considered vulnerable to the historic McClellan Air Force Base. Both service areas are also vulnerable to industrial activities such as electronic, plastic and metal manufacturing, petroleum storage facilities, and known groundwater contaminant plumes. The SSA may also be vulnerable to recreation activities associated with the American River.

SSWD Service Area



Important Information About...

Nitrate: Nitrate in drinking water at levels above 45 milligrams per liter (mg/l) is a health risk for infants less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/l may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

Arsenic: While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The standard balances the current

Continued on the back page

Contaminants That May Be Present In Source Water Include:

Microbial Contaminants such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic Contaminants such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and Herbicides which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic Chemical Contaminants including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.

Radioactive Contaminants which can be naturally-occurring or be the result of oil and gas production and mining activities.

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2011 Summary of Detected Constituents

How to Use This Table

1. Find your service area along the top of the chart (you will need to look at both surface water and groundwater supplies).
2. Compare levels from your system's water to the state and federal standards (MCL) if applicable.

Key to Abbreviations

N/A	Not applicable
ND	Not detected
NR	Not required
NTU	Nephelometric Turbidity Units (a measure of clarity)
TOC	Total Organic Carbon
pCi/L	Picocuries per liter (a measure of radiation)
PPM	Parts per million or milligrams per liter (mg/l)
PPB	Parts per billion or micrograms per liter (µg/l)
µmhos/cm	Microhms per centimeter
DBP	Disinfection by-products

Water Quality Definitions

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Notification Level (NL): This is a non-regulatory health-based advisory level set for constituents that have no MCL but may be a candidate for regulation in the future.

DETECTED PRIMARY DRINKING WATER CONSTITUENTS – regulated to protect your health

				NORTH Service Area						SOUTH Service Area						
				SSWD (groundwater)			SJWD (surface water)			SSWD (groundwater)			CS (surface water)			
CONSTITUENT	UNITS	MCL [MRDL]	PHG or (MCLG)	RANGE	AVERAGE	SAMPLE DATE	RANGE	AVERAGE	SAMPLE DATE	RANGE	AVERAGE	SAMPLE DATE	RANGE	AVERAGE	SAMPLE DATE	MAJOR SOURCES
Arsenic	PPB	10	0.004	ND-4.1	ND	2010-11	ND	ND	2010	ND - 2.3	ND	2011	ND	ND	2006	Erosion of natural deposits
Asbestos	MFL	7	7	ND	ND	2006-07	ND - 0.2	ND	2011	ND	ND	2006-11	ND	ND	2004	Erosion of natural deposits
Barium	PPB	1000	200	ND-180	ND	2010-11	0.1	0.1	2010	ND - 200	ND	2011	ND	ND	2006	Erosion of natural deposits
Chromium (total)	PPB	50	(100)	ND-13	ND	2010-11	ND	ND	2010	ND-11	ND	2011	ND	ND	2006	Erosion of natural deposits
Fluoride {A}	PPM	2	1	0.11-0.31	0.2	2010-11	ND	ND	2011	ND-0.21	ND	2011	0.84-0.93	0.89	2011	Erosion of natural deposits
Nitrate (as NO3)	PPM	45	45	ND-30.0	10.4	2011	ND	ND	2011	ND-33.0	11	2011	ND	ND	2011	Leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Tetrachloroethylene (PCE)	PPB	5	0.06	ND-1.6	ND	2010-11	ND	ND	2010	ND	ND	2011	ND	ND	2009	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
Trichlorothethylene (TCE)	PPB	5	0.8	ND-3.9	ND	2010-11	ND	ND	2010	ND	ND	2011	ND	ND	2009	Discharge from metal degreasing sites and other factories
Gross Alpha particle activity	pCi/L	15	(0)	ND	ND	2005-08	ND	ND	2008	ND-5.85	ND	2005-07	ND	ND	2006	Erosion of natural deposits
Uranium	pCi/L	20	0.43	ND-2.68	ND	2005-11	ND	ND	2003	ND-3.1	ND	2005-07	ND	ND	2009	Erosion of natural deposits
Radium 226	pCi/L	5 (combined Ra -226 and -228)	0.05	ND-1.10	ND	2005-11	ND	ND	2003	ND	ND	2005-07	ND	ND	2004	Erosion of natural deposits
Radium 228	pCi/L		0.019	ND-1.59	ND	2005-11	ND	ND	2008	ND-1.51	ND	2005-07	ND	ND	2004	
CONSTITUENT	UNITS	MCL [MRDL]	PHG or (MCLG)	RANGE	AVERAGE	SAMPLE DATE	RANGE	AVERAGE	SAMPLE DATE	RANGE	AVERAGE	SAMPLE DATE	RANGE	AVERAGE	SAMPLE DATE	MAJOR SOURCES
Control of Disinfection By-Product precursors (TOC) {B}	PPM	NA	Treatment requirement if average TOC > 2	NR			1.2-1.7	1.4	2011	NR			0.67-1.56	0.93	2011	Various natural and man-made sources
Turbidity {B}	NTU	NA	TT = 1 NTU	NR			0.07		2011	NR			0.10		2011	Soil runoff
		NA	TT = 95% of samples < 0.3 NTU	NR			100%			NR			100%			
CONSTITUENT	UNITS	MCL [MRDL]	PHG or (MCLG)	HIGHEST MONTHLY RESULT		# MONTHS WITH POSITIVE RESULTS		SAMPLE DATE		HIGHEST MONTHLY RESULT		# MONTHS WITH POSITIVE RESULTS		SAMPLE DATE		MAJOR SOURCES
Total Coliform Bacteria (distribution system)	% Tests Positive	>5% of mo. samples are positive	(0)	0.013		1 month		2011		2.33%		2 months		2011		Naturally present in the environment
CONSTITUENT	UNITS	MCL [MRDL]	PHG or (MCLG)	90TH PERCENTILE RESULT			NUMBER OF SAMPLES/ NUMBER EXCEEDING ACTION LEVEL			SAMPLE DATE						MAJOR SOURCES
Copper (at tap)	PPB	1,300	300	38			50/0			2010						Internal corrosion of household plumbing systems; discharge from refineries and factories; erosion of natural deposits
CONSTITUENT	UNITS	MCL [MRDL]	PHG or [MRDLG]	RANGE			AVERAGE			SAMPLE DATE						MAJOR SOURCES
Chlorine Residual (distribution system)	PPM	[4]	[4]	0.63-0.90			0.76			2011						Drinking water disinfectant added for treatment
Trihalomethanes (distribution system)	PPB	80	None	ND-61			38.5			2011						By-product of drinking water chlorination
Haloacetic Acids (distribution system)	PPB	60	None	ND-41			32.7			2011						By-product of drinking water chlorination

DETECTED SECONDARY DRINKING WATER CONSTITUENTS – regulated for aesthetic qualities

CONSTITUENT	UNITS	MCL	PHG OR (MCLG)	RANGE	AVERAGE	SAMPLE DATE	RANGE	AVERAGE	SAMPLE DATE	RANGE	AVERAGE	SAMPLE DATE	RANGE	AVERAGE	SAMPLE DATE	MAJOR SOURCES
Chloride	PPM	500	None	8.0-65	33	2010-11	2.1-3.1	2.8	2011	3.1-96.0	20.8	2011	15-86	42	2011	Runoff/leaching from natural deposits
Color	UNITS	15	None	ND-5	ND	2010-11	ND	ND	2010	ND	ND	2011	1	1	2011	Naturally - occurring organic materials
Copper	PPB	1000	170	ND	ND	2010-11	ND	ND	2010	ND-19	ND	2011	ND	ND	2011	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Iron	PPB	300	None	ND-130	20	2010-11	ND	ND	2011	ND-7600 {C}	160	2011	ND	ND	2006	Leaching from natural deposits
Manganese	PPB	50	None	ND-27	5	2010-11	ND	ND	2010	ND-120 {C}	ND	2011	ND	ND	2006	Naturally - occurring organic materials
Specific Conductance	µmhos	1600	None	200-600	346	2010-11	63-85	72	2011	140-730	347	2011	99-223	169	2010	Substances that form ions when in water
Sulfate	PPM	500	None	2.3-22.0	7.8	2010-11	4.0-7.3	5.9	2011	ND-44.0	8.1	2011	9.4-9.7	9.6	2011	Runoff/leaching from natural; deposits; industrial wastes
Total Dissolved Solids	PPM	1000	None	170-430	255	2010-11	28-54	41	2011	130-450	233	2011	6-91	83	2011	Runoff/leaching from natural deposits
Turbidity	NTU	5	None	ND-0.78	0.07	2010-11	0.02-0.07	0.05	2011	ND-0.36	0.03	2011	0.02-0.10	0.05	2011	Soil runoff and leaching

DETECTED UNREGULATED DRINKING WATER CONSTITUENTS {D}

CONSTITUENT	UNITS	MCL	PHG OR (MCLG)	RANGE	AVERAGE	SAMPLE DATE	RANGE	AVERAGE	SAMPLE DATE	RANGE	AVERAGE	SAMPLE DATE	RANGE	AVERAGE	SAMPLE DATE	MAJOR SOURCES
Chloroform {E}	PPB	No Standard	(70)	ND-0.52	ND	2004-08	NR	NR	NR	ND	ND	2003-07	NR	NR	NR	By-product of drinking water chlorination or other sources
Dichlorodifluoromethane	PPB	NL=1000	None	ND-24	ND	2004-09	ND	ND	2010	ND	ND	2003-07	ND	ND	2006	Used in electrical insulation, as a propellant and refrigerant, pesticide
Hardness	grains/ gallon	No Standard	None	4.4-14.0	6.6	2010-11	1.6-2.3	1.8	2011	3.0-19.9	7.6	2011	2.5-4.6	3.8	2011	Hardness is the sum of polyvalent cations present in the water, generally naturally occurring magnesium and calcium.
	PPM	No Standard	None	75-240	113		27-39	31		52-340	130		42-79	65		
Sodium	PPM	No Standard	None	9.5-51	25	2010-11	1.9-2.9	2.5	2011	7.4-45.0	14.9	2011	1.8-7.1	4.5	2006	Naturally-occuring salt in water

{A} SSWD's fluoridation program provides the addition of fluoride to all of SSWD's South Service Area's drinking water. SSWD adjusts the natural levels of fluoride to the CDPH recommended optimal fluoride level in the water supply.

{B} Only surface water sources must comply with primary drinking water standards for control of Disinfection By-Product Precursors and Turbidity.

{C} One of the District's wells in the SSA detected iron and manganese over the secondary standards, which are aesthetic standards. Subsequent samples from this well have reported results that are below the secondary standards. This well does not have any history of the high levels of iron and manganese. The well will be monitored on a quarterly basis to determine a more accurate representative concentration.

{D} Unregulated constituents monitoring helps determine where certain constituents occur and whether they need to be regulated.

{E} This is source/wellhead concentration prior to treatment.

The State allows SSWD to monitor for some constituents less than once per year because the concentrations of these constituents do not change frequently. Some of the data, though representative, are more than one year old.

Measurements

PPM (parts per million):
3 drops in 42 gallons
1 second in 12 days
1 inch in 16 miles

PPB (parts per billion):
1 drop in 14,000 gallons
1 second in 32 years
1 inch in 16,000 miles

PPT (parts per trillion):
1 drop in 14 million gallons
1 second in 32,000 years
1 inch in 16 million miles

SACRAMENTO SUBURBAN WATER DISTRICT
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